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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Applicant:	Shlomo SHKOLNIK	§	
Serial No.:	09/914,487	§	
Filed:	August 27, 2001	§	Group Art Unit: 2123
For:	MULTIDISCIPLINARY PROJECT INTEGRATION SYSTEM	§	Attorney Docket: **36538**
Examiner:	Jason Scott PROCTOR	§	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

Sir:

Further to a Notification of non-Compliant Appeal Brief dated September 22, 2008, a Notice Of Appeal filed April 21, 2008 and an Appeal Brief filed August 21, 2008, the following is Applicant's revised Brief On Appeal. Applicants have overcome the Non-Compliant objection by omitting the cancelled claims from the grounds of rejection and arguments sections. Applicants have also taken the opportunity to correct typographical errors in the brief.

An amendment after final was filed along with the notice of appeal on April 21, 2008, however the amendment was not entered by the Examiner. Applicants filed a further amendment after final rejection on June 18, 2008 and the Examiner issued an Advisory Action on August 11, 2008, entering the amendment. A personal interview between the Examiner and Applicant's representative was conducted on June 2, 2008.

REAL PARTY OF INTEREST

The real party in interest of this appeal is the following party: Shlomo SHKOLNIK

RELATED APPEALS AND INTERFERENCES

This appeal has no related proceedings or interferences.

STATUS OF CLAIMS

A. TOTAL NUMBER OF CLAIMS IN THE APPLICATION

The claims in the application are: 1-92.

B. STATUS OF ALL THE CLAIMS IN THE APPLICATION

Claims canceled: 1-22, 27-29, 32-40, 43-50, 52-71 and 77-79.

Claims withdrawn from consideration but not cancelled: NONE

Claims pending: 23-26, 30, 31, 41, 42, 51, 72-76 and 80-92.

Claims allowed: NONE

Claims rejected: 23-26, 30, 31, 41, 42, 51, 72-76 and 80-92.

Claims objected to: NONE

C. CLAIMS ON APPEAL

The claims on appeal are: 23-26, 30, 31, 41, 42, 51, 72-76 and 80-92.

STATUS OF AMENDMENTS

An amendment after final rejection was filed on June 18, 2008 and entered by the Examiner as indicated in the Advisory Action of August 11, 2008. Therefore, claims 23-26, 30, 31, 41, 42, 51, 72-76 and 80-92 on appeal are as amended in the amendment after final office action filed on June 18, 2008. Applicant also filed an amendment after final on April 21, 2008. However, this amendment was not entered by the Examiner and is therefore not related to in the present appeal brief.

SUMMARY OF CLAIMED SUBJECT MATTER

The independent claims in the application are claims 23, 72, 82, 86, 87 and 92, which are repeated below with reference to passages in the application as filed providing support, in bold letters.

Independent claim 23 refers to a method of forming a vehicle design index, comprising:

providing a plurality of computerized design tools, said tools being adapted for carrying out a design task of a particular system of a vehicle, at least some of which tools store information restricted to viewing by a respective limited group of workers, which workers are assigned to a particular system or systems of the vehicle; **{page 8, lines 14-20; Fig. 1, references 40A-L}**

gathering, by a computer, from the plurality of computerized design tools, information on elements of different systems of the vehicle, wherein the gathering includes retrieving from at least one of the computerized tools information on fewer than all the elements of the vehicle required for design of the system described by the tool; **{page 5, line 32 – page 6, line 9; page 8, lines 21-28}**

storing the gathered information in the index; and **{page 8, lines 21-28; page 9, lines 18-20}**

opening the index for viewing by workers at least some of which are assigned to a different systems of the vehicle from each other, **{page 8, lines 29-30}**

wherein storing the information in the index comprises storing only information which is authorized for viewing by workers assigned to any of the plurality of systems. **{page 9, lines 14-16}**

Independent claim 72 refers to a method of providing information between workers designing a vehicle, comprising:

providing a working environment including a plurality of different departments, assigned to perform design tasks of respective different vehicle systems; **{page 8, lines 6-14; Fig. 1, reference 10}**

selecting a plurality, but fewer than 10%, of the physical elements of each system of the vehicle to serve as major elements of the vehicle; **{page 5, lines 18-19; page 9, lines 28-33}**

gathering, for each of the major elements, information regarding the element, including an indication of the relative assembly of the element in the vehicle and a

reference to a worker in charge of the element; **{page 6, lines 14-17; page 12, lines 7-12 and lines 17-21}**

storing the gathered information in a database, having records only for the major elements; **{page 5, lines 1-4; page 6, lines 17-18; Fig. 1, reference 20}**

searching the database for information on one or more of the major elements; and **{page 6, line 18; page 10, lines 18-20}**

performing at least one of:

displaying information relating to the one or more major elements; and **{page 19, lines 3-6}**

sending an electronic message to a worker in charge of the element based on information found in the search. **{page 19, lines 12-16}**

Independent claim 82 refers to a method, comprising:

providing computerized design tools for various systems of a vehicle; **{page 8, lines 14-20; Fig. 1, references 40A-L}**

designing various systems of the vehicle by workers using the computerized design tools; **{page 8, lines 6-20; Fig. 1, reference 30}**

generating a database including information on the relationship between elements of the vehicle from the various systems, but including information on fewer than all the elements of the vehicle, said database being open to viewing by workers assigned to a plurality of said systems; **{page 9, lines 2-16; Fig. 1, reference 20}**

opening the database for viewing by a worker assigned to a particular system of the vehicle; **{page 8, lines 29-34}**

determining from the database, by the worker, which elements of systems other than the system to which the worker is assigned, are directly affected by a possible change in an element of the vehicle in the system to which the worker is assigned; and **{page 18, lines 23-29, Fig. 5, reference 156}**

performing at least one of:

displaying information relating to one or more of said affected elements; and **{page 19, lines 3-6}**

sending an electronic message to at least one worker in charge of the elements determined to be affected by the change, to discuss the possible change. **{page 19, lines 12-16}**

Independent claim 86 refers to a method of providing information between workers designing a vehicle, comprising:

providing a working environment including a plurality of different departments, assigned to perform design tasks of respective different vehicle systems or disciplines; **{page 8, lines 6-14; Fig. 1, reference 10}**

selecting fewer than 10% of the physical elements of each of the systems of the vehicle to serve as major elements of the vehicle; **{page 5, lines 18-19; page 9, lines 28-33}**

gathering, for each of the major elements, information regarding the element, including an indication of a relative assembly of the element in the vehicle and a reference to a worker in charge of the element; **{page 6, lines 14-17; page 12, lines 7-12 and lines 17-21}**

storing the gathered information in a database, having records only for the major elements; **{page 5, lines 1-4; page 6, lines 17-18; Fig. 1, reference 20}**

managing in the database, for each selected element, an action item list including listings of at least one of actions related to the element which need to be performed or which were performed; **{page 15, lines 3-6}**

opening the database for viewing by authorized workers of a plurality of departments, who are assigned to different systems of the vehicle or who utilize different engineering disciplines involved in the design of the vehicle; **{page 8, lines 29-30}**

searching the database for information on one or more of the major elements, which may be affected by a possible change to the designed vehicle; **{page 18, lines 15-16 and lines 23-29; Fig. 5, references 150 and 156}**

contacting a worker in charge of the element based on information found in the search; and **{page 18, lines 32-34; Fig. 5, reference 158 and 160}**

discussing with the contacted worker the proposed change. **{page 18, line 33 – page 19, line 1; Fig. 5, reference 160}**

Independent claim 87 refers to a method of design of an aircraft or ship, comprising:

(a) providing a plurality of design tools each particular tool having a group of authorized users and each containing information regarding parts used in an aircraft or ship under design sufficient to design a portion of the aircraft or ship using the particular design tool; **{page 8, lines 14-20; Fig. 1, references 40A-L}**

(b) providing a database containing information regarding fewer than all the parts needed for using any of the design tools and having information regarding parts

used for a plurality of said design tools; **{page 5, line 32 – page 6, line 9; page 8, lines 21-28; Fig. 1, reference 20}**

(c) providing access to the database to authorized users of more than one design tool; and **{page 8, lines 29-30}**

(d) utilizing the one design tool and information not contained in the one design tool but contained in the database to design or modify a part by an authorized user of the one design tool. **{page 10, lines 16-21; page 18, line 30 – page 19, line 1}**

Independent claim 92 refers to a computer system having stored therein a database **{Fig. 1, reference 20}** for storing parts information in a working environment including a plurality of different departments**{Fig. 1, reference 10}**, assigned to perform design tasks of respective different aircraft systems **{page 8, lines -20}** in which at least some parts of the aircraft are assigned a worker code that indicates worker responsibility for design of that part **{page 13, lines 12-18}** and also having a database that associates each of the worker codes with one or more workers responsible for the design **{page 13, lines 5-11}**, such that changing worker assignments does not require changes in the part numbers **{page 13, lines 19-22}**.

Dependent claims 51, 74, 80, 81, 83, 84, 88 and 89 are separately argued by applicant and are repeated below with reference to passages in the application as filed providing support, in bold letters.

Claim 51 refers to a system according to claim 92, wherein at least some of the workers are associated with more than one of the worker codes. **{page 13, lines 12-16}**

Claim 74 refers to a method according to claim 72, wherein selecting the major elements comprises selecting fewer than 1% of the physical elements of the vehicle. **{page 5, lines 19-20}**

Claim 80 refers to a method according to claim 23, comprising initiating communication between workers designing the vehicle using different computerized tools, using information in the index. **{page 18, line 30 – page 19, line 1}**

Claim 81 refers to a method according to claim 23, wherein gathering information on elements of the vehicle comprises gathering general information authorized for viewing by workers from a plurality of departments on elements having some details restricted to viewing by a limited group of workers. **{page 5, line 32 – page 6, line 9; page 9, lines 14-16}**

Claim 83 refers to a method according to claim 82, wherein generating the database comprises generating a database including fewer than 10% of the elements of the vehicle, utilized by the design tools in designing the vehicle. **{page 5, lines 18-19}**

Claim 84 refers to a method according to claim 82, wherein generating the database comprises generating a database including information insufficient to allow performing all the design tasks of the vehicle, which can be performed by the computerized tools. **{page 5, line 32 – page 6, line 9; page 9, lines 14-16}**

Claim 88 refers to a method according to claim 86 wherein the information gathered in the database is limited to data that is essential to each authorized user for determining possible problems connected with issues to which the worker is not assigned. **{ page 5, line 32 – page 6, line 9; page 8, lines 29-30}**

Claim 89 refers to a method according to claim 23 wherein workers assigned to said plurality of systems includes workers assigned to all the systems. **{page 9, lines 14-16}**

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

There is only one ground of rejection to be reviewed in this appeal, namely:

Claims 23-26, 30, 31, 41, 42, 51, 72-76 and 80-92 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Thackston (US 6,295,513) in view of Carver (US 4,937,768).

ARGUMENTS

Claims 23-26, 30, 31, 41, 42, 51, 72-76 and 80-92 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Thackston (US 6,295,513) in view of Carver (US 4,937,768).

According to the Examiner, Thackston teaches all the elements of the invention as claimed, but does not explicitly teach a "vehicle" example and Carver, which is directed to a vehicle design system, makes it obvious to apply Thackston to a vehicle.

Since the Examiner's reasoning is set out most clearly in the final office action issued on December 20, 2007 extensive reference is made to this document.

Applicants respectfully traverse the rejection and submit that the Examiner has not set out a *prima facie* case of obviousness since Thackston fails to teach all the elements of the claims of the present application. The elements that are missing provide a substantial difference from the prior art. While the Examiner references portions of Thackston as providing a basis for his contention, as shown below, the cited portions do not provide such basis.

In general, the prior art, as exemplified by Thackston, used large databases which included all the information required for designing a system such as a vehicle. Since some of the information used in such a design is confidential, the prior art suggested several different methods of protecting the information. Thackston for example teaches the use of a database (210) for each individual design group. Databases 210 contain all the information about the elements designed by the group, In addition, each database 210 may contain a "scratch pad" module 892which contains a working copy of the base design of part being designed. see Figs. 3-8 and the corresponding description on Col. 12, line 33 – Col. 17, line 51 of Thackston.

Since the individual groups require information on other parts of the system for integration of the different elements, Thackston further teaches a NICECAD System 100 which provides limited access to databases 210 of all groups In order to protect the information stored in the databases, authorization is required for accessing information through the NICECAD System, see Col. 14, line 52 – Col. 15, line 3. Thus, the NICECAD system maintains information on all the elements of the designed by the group plus other information about other elements in the system required for integration of the design changes into the overall system. The NICECAD system maintains the

information such that confidential information about a given element is accessible only by the individual group designing the element.

Thus, in Thackston, the design data for individual modules is saved in the individual databases 210. There does not appear to be any database which stores less than the complete baseline data for a particular design group nor any database that stores baseline information for more than one design group.

Prior art systems such as Thackston are problematic since the overall system needed for design (all databases 210) can include information of thousand of elements of the designed system and are cumbersome to access and non-portable. This is evident for example from Col. 14, line 42 – col. 15, line 7 of Thackston, where a description of securing the access of information is provided.

The inventor of the present application recognized these problems with the prior art systems and suggested a simpler system for designing a vehicle. According to the disclosure of the present application, the use of separate databases for each group of designers is taught, see tools 40A-L in Fig. 1 and the description thereof on page 8, lines 6-20 of the specification as filed. Unlike Thackston in which access to information in databases of other groups must be authorized, the present application describes a system in which a central database (database 20 in Fig. 1) , accessible by all groups, is provided. This database includes mainly information that is required by other groups, see page page 8, lines 21-30.

Thus, the central database does not include information restricted from members of other design groups and members of multiple design groups (for example all the design groups) are authorized to access the central database, see page 9, lines 14-16. This storage of only a limited amount of information that is not particularly sensitive substantially reduces the amount of information stored in the database and makes the database easily accessible and portable and makes its updating simpler.

Claims 23, 72, 82, 86, 87 and 92 are the only independent claims in the application. Applicant will concentrate on these claims and will argue the different aspects claimed in each of them separately. The dependent claims are patentable at least by virtue of their patentable parent claim(s). Dependent claims 51, 74, 80, 81, 83, 84, 88 and 89 are separately argued below.

Claim 23

Claim 23 recites:

"gathering, by a computer, from the plurality of computerized design tools, information on elements of different systems of the vehicle, wherein the gathering includes retrieving from at least one of the computerized tools information on fewer than all the elements of the vehicle required for design of the system described by the tool;

storing the gathered information in the index;

The Examiner assets that Thackston teaches this limitation. Applicant respectfully disagrees.

On page 9 of the Office Action, the Examiner responds to applicant's arguments and indicates that an index is generated in Thackston by CAD Processing Module 932 which is part of NICECAD Server System 220 shown in Figs. 2 and 9. The Examiner then continues and states that Thackston teaches that the index does not contain information on all parts of the elements required for the design of the system, by referring to module 892, which is part of database 210 shown on Figs. 2 and 8.

The Examiner errs in several respects.

First, there is no teaching in Thackston of any index being present in system 200. In fact, as indicate in col. 14, line 52 to col. 15, line 3, the listings and control of check-in and check out are performed in the individual databases. Applicant submits that the only indices in Thackston are in modules 210 and that module 200 store no information on the individual elements.

Second, even assuming arguendo that system 200 does have an index and does store such an index, there is no teaching or rational for this index being incomplete in the sense defined in the limitation quoted above,

Third, applicant submits that the databases 210 have information only on the particular design tool service by database 210.

In the event that the Examiner attempts to identify the index and the gathering with the entire system including a plurality of databases 210 then the rejection fails on the basis that this "database" include complete information on entire design of all the elements and not as claimed.

Applicant submits that in making the comparisons that he has made the Examiner has ignored the basic difference between the claimed system and Thackston does not include "*information on fewer than all the elements of the vehicle required for design of the system described by the tool.*" However one understands Thackston, the databases in

Thackston either include complete data needed for the particular design tool (210) or cor the entire system (100). This is of the essence of Thackston.

The Examiner's reliance on the description of module 932 does not change the teaching of Thackston. As indicated at col. 21, lines 50-54, module 932 allows for the uploading of uploading and conversion for storage of data from the databases 210. There is no teaching whatsoever of uploading data from a plurality of such databases, without uploading data required for any design task and storing that data.

Even agreeing arguendo that database 210 or alternatively system 100 meets the requirement referred to above, Thackston fails to teach at least one additional (and related) element of claim 23 as amended after final, namely: *"wherein storing the information in the index comprises storing only information which is authorized for viewing by workers assigned to any of the plurality of systems."* The Examiner cites from Thackston, col. 15, lines 15-27 as apparently teaching this element: "*Stored design and analysis access permission data module 860 allows an approval authority to assign access permission to limit access to those portions of the part design module, those specifications (or portions thereof), and those EAS processing modules as appropriate. This serves configuration control by limiting access to only those who need it.*" (Emphasis added).

Thus, according to this quotation of Thackston, it is taught to limit *access* to certain information in the database. However, Thackston does not teach nor suggest storing only information which is authorized for viewing by workers assigned to any of the plurality of systems as recited in claim 23. On the contrary, by providing methods to limit access to some information, it is evident that Thackston's intention is to store all information in the database, including information which is not authorized to be viewed by workers of other departments.

Accordingly, applicant submits that claim 23 is patentable over Thackston in view of Carver, since Carver is not alleged by the Examiner to be relevant to the details of the index or the database..

The Examiner has presented the observation on page 10 of the final office action that claim 23 does not require that the excluded information is made available to workers outside the group that is using the excluded information. Applicant does not understand the thrust of this observation. The method defines by claim 23 defines the index and its formation. The claim is (correctly) silent regarding information that is not part of the database, for example, information that is not accessible to unauthorized users.

Furthermore, the Examiner's observation is difficult to understand since it looks for something in the claim that should not be there, since the excluded information is not available to unauthorized users.

Claim 72

Claim 72 recites:

"selecting a plurality, but fewer than 10%, of the physical elements of each system of the vehicle to serve as major elements of the vehicle;

gathering, for each of the major elements, information regarding the element, including an indication of the relative assembly of the element in the vehicle and a reference to a worker in charge of the element;

storing the gathered information in a database, having records only for the major elements;"

The Examiner rejected claim 72 based on MPEP 2144 (II)A according to which omission of an element and its function is obvious if the function of the element is not desired and states that "selecting a plurality, but fewer than 10% of the physical elements" merely omits to select additional elements and does not retain the benefit of selecting additional elements. Applicant has traversed the rejection in his response filed on October 1, 2007 and submitted a summary of relevant case law according to which MPEP 2144 (II)A qualifies only if the function is not desired. A copy of the summary of case law as filed on October 1, 2007 is attached herewith as Appendix A.

As previously argued by applicants on October 1, 2007, the entire concept of Thackston is that information on all parts should be stored in the database since they are required for the designers of the system. Accordingly, it would not have been obvious to store only information on fewer than 10% of the elements.

The Examiner has responded to applicants arguments on pages 10 and 11 of his office action of December 20, 2007 and stated that not all information on all parts should be available to each of the designers in Thackston as Thackston teaches that permissions are required for some of the information. While applicant agrees with the Examiner that not all information is accessible by *all* designers, it is a primary principle in Thackston that all information be stored in the system, since all of the information is used by at least some designers, so all the information must be present in the database. (See Figs. 3-8 and the descriptions thereof on Col. 12, line 33 – Col. 17, line 51.)

Thackston uses a database where all the information required for designing a system is stored. In order to protect secret information, authorization is requested to view

some of the information. However, Thackston system would not operate if no information on all of the elements, and certainly not of fewer than 10% of the elements, would have been stored in the database. Since all of this information is required to designers of the system. Thackston does not provide any other database where information on elements can be found.

The Examiner indicated that the undesired elements of Thackston would have been omitted in order to save space, to simplify the design process, or to enhance the security features described by Thackston. However, the Examiner did not relate to the question of how Thackston's system would operate as a database for everyone, without having this information stored and available in the system.

Applicant submits that the function of the design systems of both Thackston and the present invention is to allow design workers of a given system access to the elements of the vehicle outside their own system that they may need to know about in order to be able to design their own system properly. If the Examiner's analysis is correct that elements have been left out of Thackston's system to meet the requirements of the present claim 72, then since the present claimed system allows the designers to perform their design, the elements have been omitted while retaining the function. This is a true indicia of patentability.

In a very real sense, omission of these elements to the extent that only 10% (claims 72, 83 and 86) or 1% (claim 74) of the total elements is found in the database, provides a new database, one which is more portable and easier to use in many ways. This new database not only does not reduce the functionality of the system but actually increases the functionality, which is a further indicia of patentability.

Applicant submits that the reduction in the scope of the universally available database is a patentable feature since it does not reduce the functionality of the design system as a whole, and actually enhances it. Alternatively, applicant submits that the new database is so different from the database of Thackston that it can not be considered a mere modification of it.

Claim 82

Claim 82 recites "*generating a database including information on the relationship between elements of the vehicle from the various systems, but including information on fewer than all the elements of the vehicle, said database being open to viewing by workers assigned to a plurality of said systems*". According to the Examiner, the element of "*generating a database including information on the relationship between*

elements of the vehicle from the various systems, but including information on fewer than all the elements of the vehicle" is obvious for the same reasons as set forth regarding claim 72. The Examiner also contends that the element "*said database being open to viewing by workers assigned to a plurality of said systems*" is obvious for the same reasons as set forth regarding claim 23.

Applicant respectfully traverses the rejection and submits that claim 82 is patentable at least for the same reasons as claims 23 and 72. Applicants will not burden the board with repeating all of the arguments for patentability. Applicant notes that the rejection of claim 82 is substantially the same as that of claims 23 and 72.

Claim 86

Claim 86 recites, similar to claim 72:

"*selecting fewer than 10% of the physical elements of each of the systems of the vehicle to serve as major elements of the vehicle;*

gathering, for each of the major elements, information regarding the element, including an indication of a relative assembly of the element in the vehicle and a reference to a worker in charge of the element;

storing the gathered information in a database, having records only for the major elements;" and is rejected for substantially the same reasons as claim 72.

Applicant respectfully traverses the rejection and submits that claim 86 is patentable at least for the same reasons as claim 72.

Claim 87

Claim 87 recites:

"*(b) providing a database containing information regarding fewer than all the parts needed for using any of the design tools and having information regarding parts used for a plurality of said design tools;*

(c) providing access to the database to authorized users of more than one design tool;"

The recited elements are rejected by the Examiner for substantially the same reasons as claims 23 and 72 above. Applicant respectfully traverses the rejection and submits that claim 87 is patentable at least for the same reason as claims 23 and 72. Applicant notes that the rejection of claim 87 is substantially the same as that of claims 23 and 72.

Claim 92

The Examiner rejected claim 92 on the basis that Thackston teaches a computer having stored therein a database and does not describe that changing working assignments requires changing part numbers. The Examiner did not relate to the remainder of the claim language since it is directed to an environment in which the invention could be placed and does not describe the invention.

Applicants respectfully disagree with the Examiner and submit a copy of claim 92:

"A computer system having stored therein a database for storing parts information in *a working environment including a plurality of different departments, assigned to perform design tasks of respective different aircraft systems* in which at least some parts of the aircraft are assigned a worker code that indicates worker responsibility for design of that part and also having a database that associates each of the worker codes with one or more workers responsible for the design, such that changing worker assignments does not require changes in the part numbers."

Only the emphasized part of the claim refers to the working environment. The Examiner has ignored the remainder of the claim language which defines the claimed system and has therefore not provided a *prima facie* case of obviousness against claim 92.

In particular, the claim further requires that the system includes a second database that associates each of the worker codes with one or more workers responsible for design, such that changing worker assignments does not require changes in the part numbers. No such second database is taught or suggested by Thackston. Thackston teaches assigning version numbers to design models, see for example Col. 15, lines 41-45. However, applicant could not find any reference in Thackston to assigning worker codes to workers responsible for designs and certainly not having a second database associating each of the worker codes with one or more workers responsible for the design, such that changing worker assignments does not require changes in the part numbers. As argues above, the only databases found in Thackston's system are databases 210 which include information on parts designed by individual designer groups.

Accordingly, claim 92 is believed to be patentable over the cited art.

Dependent claims

The dependent claims are believed to be patentable at least by virtue of their patentable parent claim. Nevertheless, applicant submits that at least some of the claims provide further patentability over their patentable parent claim.

Claim 51

Claim 51 recites "wherein at least some of the workers are associated with more than one of the worker codes." The Examiner rejected claim 51 since Thackston teaches that the configuration management codes comprises three digits. Applicant respectfully traverses the rejection and submits that the Examiner has not presented a *prima facie* case of obviousness against claim 51 since the configuration management codes are assigned to design models and not to workers, see Col. 15, lines 41-45. Furthermore, a three digit codes does not meet the recitation of "associated with more than one of the worker codes". Applicant submits that Thackston does not teach nor suggest associating more than one worker code to a worker and claim 51 is patentable over the cited art.

Claim 74

Claim 74 recites "wherein selecting the major elements comprises selecting fewer than 1% of the physical elements of the vehicle." Applicant submits that is not taught nor suggested by Thackston. As argued above with respect to claim 72, in Thackston information on all of the elements is stored, and in any event information on more than 1% of the elements is stored.

Claim 80

Claim 80 recites "initiating communication between workers designing the vehicle using different computerized tools, using information in the index." This is not taught nor suggested by Thackston. The Examiner cited from col. 17, lines 34-47 as apparently teaching this recitation: "For example, if a design team and EAS team have a multimedia communications session using the NICECAD system to discuss certain design issues, a record may be stored reflecting the session." Applicant respectfully submits that the Examiner has not provided a *prima facie* case of obviousness against claim 80 since he did not show where the claimed feature is found in the art. The cited section refers to storage of communication session, however, Thackston does not initiate such communications using different computerized tools, using information in the index as in claim 80. Accordingly, claim 80 is patentable over the cited art.

Claim 81

Claim 81 recites "wherein gathering information on elements of the vehicle comprises gathering general information authorized for viewing by workers from a plurality of departments on elements having some details restricted to viewing by a limited group of workers." The Examiner cites against claim 81 from Cols. 14 and 15 of Thackston, relating to access permissions to information. Applicant respectfully disagrees with the Examiner and submits that the examiner has not provided a *prima facie* case of obviousness since the Examiner did not show where the claimed features are found in the art. Claim 81 relates to gathering information and not to accessing information as in the cited sections of Thackston. Applicant submits that this is not taught nor suggested by Thackston. As argued above with respect to claims 23 and 72, in Thackston, all the information on elements of the system is stored in the database. Accordingly, Thackston does not teach gathering general information on elements having restricted information as required by claim 81.

Claim 83

Claim 83 recites "wherein generating the database comprises generating a database including fewer than 10% of the elements of the vehicle, utilized by the design tools in designing the vehicle." This is similar to the recitation argued with respect to claim 72 above and is patentable at least for the same reason as claim 72.

Claim 84

Claim 84 recites "wherein generating the database comprises generating a database including information insufficient to allow performing all the design tasks of the vehicle, which can be performed by the computerized tools." This is not taught nor suggested by Thackston. Claim 84 depends on independent claim 82 which recites " generating a database including information on the relationship between elements of the vehicle from the various systems, but including information on fewer than all the elements of the vehicle, *said database being open to viewing by workers assigned to a plurality of said systems*" (emphasis added)

As argued with respect to claims 23, 72 and 82 above, Thackston teaches only a single database for each of the worker groups which includes a baseline design module of the element to be designed by the worker group, see Col. 15, line 46 – Col. 16, line 4. As described in the referred section, the baseline design module is not available to all of the designers.

The Examiner indicates that the claim encompasses a database storing no information or omitting some information and refers to MPEP 2144.04(II)(A) referred to

above. Applicant respectfully submits that the claim clearly required information to be stored in the database and that omitting information from the database of Thackston contradicts the primary object of Thackston which requires all information for designing the system, see arguments on claim 72 above. Accordingly, claim 84 is believed to be patentable over the cited art.

Claim 88

Claim 88 recites "wherein the information gathered in the database is limited to data that is essential to each authorized user for determining possible problems connected with issues to which the worker is not assigned." The Examiner rejected the claim under 35 USC 112, the claim has been amended to overcome the rejection on June 18, 2008. Applicant submits that with the amendment to claim 88 which overcomes the §112 rejection, the rejection under §103 appears to be moot. In any event, applicant submits that the claim, as amended, is patentable over Thackston in view of Carver since Thackston does not limit the information gathered in the database as argued with respect to claims 23 and 72 above.

Claim 89

Claim 89 recites "wherein workers assigned to said plurality of systems includes workers assigned to all the systems." The Examiner rejected claim 89 based on Col, 15, lines 7-11 of Thackston, quoted herein: "Stored design and analysis access permission data module 860 may comprise data assigned by the prime contractor determining which teams (or team members) may access the part design model, documents and EAS processing modules." Applicant submits that there is no hint in the cited section to store only information that is authorized to be viewed to workers assigned to all of the systems. The cited section refers to access permission only, as argued with respect to claim 23 above, also restricted information is stored in Thackston. It teaches exactly the opposite of what is claimed. Accordingly, claim 89 is patentable over Thackston in view of Carver.

Conclusion

Claims 23-26, 30, 31, 41, 42, 51, 72-76 and 80-92 are believed to patentable distinguish over Thackston and Carver, in any combination, for at least all of the above reasons. Therefore, it is respectfully requested that the Board reverse the Examiner's final rejection for those claims.

Applicants are seperately arguing the patentability of independent claims 23, 72, 82, 86, 87 and 92. The pending claims are patentable at least by virtue of their dependency.

Respectfully submitted,

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Date: October 5, 2008

CLAIMS APPENDIX

The text of the claims involved in the appeal is as follows:

23. A method of forming a vehicle design index, comprising:

providing a plurality of computerized design tools, said tools being adapted for carrying out a design task of a particular system of a vehicle, at least some of which tools store information restricted to viewing by a respective limited group of workers, which workers are assigned to a particular system or systems of the vehicle;

gathering, by a computer, from the plurality of computerized design tools, information on elements of different systems of the vehicle, wherein the gathering includes retrieving from at least one of the computerized tools information on fewer than all the elements of the vehicle required for design of the system described by the tool;

storing the gathered information in the index; and

opening the index for viewing by workers at least some of which are assigned to a different systems of the vehicle from each other,

wherein storing the information in the index comprises storing only information which is authorized for viewing by workers assigned to any of the plurality of systems.

24. A method according to claim 23, wherein gathering the information comprises gathering information on the location of the elements in the vehicle.

25. A method according to claim 23, wherein gathering the information comprises gathering interconnection information of the elements.

26. A method according to claim 23, wherein gathering the information comprises gathering references to documents describing the elements.

30. A method according to claim 23, wherein gathering the information comprises gathering information on elements of an aircraft.

31. A method according to claim 23, wherein gathering the information comprises gathering the information periodically.

41. A method according to claim 72, comprising running a verification routine which finds design faults, on the data contained within the database.

42. A method according to claim 41, wherein running the verification routine comprises running a routine which checks for elements which are distanced from each other less than a minimal allowed distance.

51. A system according to claim 92, wherein at least some of the workers are associated with more than one of the worker codes.

72. A method of providing information between workers designing a vehicle, comprising:

providing a working environment including a plurality of different departments, assigned to perform design tasks of respective different vehicle systems;

selecting a plurality, but fewer than 10%, of the physical elements of each system of the vehicle to serve as major elements of the vehicle;

gathering, for each of the major elements, information regarding the element, including an indication of the relative assembly of the element in the vehicle and a reference to a worker in charge of the element;

storing the gathered information in a database, having records only for the major elements;

searching the database for information on one or more of the major elements; and

performing at least one of:

displaying information relating to the one or more major elements; and

sending an electronic message to a worker in charge of the element based on information found in the search.

73. A method according to claim 72, wherein gathering the information comprises gathering at least three levels of a hierarchy of systems and sub-systems to which the major elements belong.

74. A method according to claim 72, wherein selecting the major elements

comprises selecting fewer than 1% of the physical elements of the vehicle.

75. A method according to claim 23, wherein the index is open for viewing by all workers working on the vehicle, while changing the index is allowed only to workers responsible for changing the data of the index.

76. A method according to claim 23, wherein gathering the information comprises gathering information on both electrical and mechanical elements.

80. A method according to claim 23, comprising initiating communication between workers designing the vehicle using different computerized tools, using information in the index.

81. A method according to claim 23, wherein gathering information on elements of the vehicle comprises gathering general information authorized for viewing by workers from a plurality of departments on elements having some details restricted to viewing by a limited group of workers.

82. A method, comprising:

providing computerized design tools for various systems of a vehicle;

designing various systems of the vehicle by workers using the computerized design tools;

generating a database including information on the relationship between elements of the vehicle from the various systems, but including information on fewer than all the elements of the vehicle, said database being open to viewing by workers assigned to a plurality of said systems;

opening the database for viewing by a worker assigned to a particular system of the vehicle;

determining from the database, by the worker, which elements of systems other than the system to which the worker is assigned, are directly affected by a possible change in an element of the vehicle in the system to which the worker is assigned; and

performing at least one of:

displaying information relating to one or more of said affected elements; and

sending an electronic message to at least one worker in charge of the elements determined to be affected by the change, to discuss the possible change.

83. A method according to claim 82, wherein generating the database comprises generating a database including fewer than 10% of the elements of the vehicle, utilized by the design tools in designing the vehicle.

84. A method according to claim 82, wherein generating the database comprises generating a database including information insufficient to allow performing all the design tasks of the vehicle, which can be performed by the computerized tools.

85. A method according to claim 82, wherein contacting workers in charge of the elements comprises determining the identities of the contacted workers, from the database.

86. A method of providing information between workers designing a vehicle, comprising:

providing a working environment including a plurality of different departments, assigned to perform design tasks of respective different vehicle systems or disciplines;

selecting fewer than 10% of the physical elements of each of the systems of the vehicle to serve as major elements of the vehicle;

gathering, for each of the major elements, information regarding the element, including an indication of a relative assembly of the element in the vehicle and a reference to a worker in charge of the element;

storing the gathered information in a database, having records only for the major elements;

managing in the database, for each selected element, an action item list including listings of at least one of actions related to the element which need to be performed or which were performed;

opening the database for viewing by authorized workers of a plurality of departments, who are assigned to different systems of the vehicle or who utilize different engineering disciplines involved in the design of the vehicle;

searching the database for information on one or more of the major

elements, which may be affected by a possible change to the designed vehicle;

contacting a worker in charge of the element based on information found in the search; and

discussing with the contacted worker the proposed change.

87. A method of design of an aircraft or ship, comprising:

(a) providing a plurality of design tools each particular tool having a group of authorized users and each containing information regarding parts used in an aircraft or ship under design sufficient to design a portion of the aircraft or ship using the particular design tool;

(b) providing a database containing information regarding fewer than all the parts needed for using any of the design tools and having information regarding parts used for a plurality of said design tools;

(c) providing access to the database to authorized users of more than one design tool; and

(d) utilizing the one design tool and information not contained in the one design tool but contained in the database to design or modify a part by an authorized user of the one design tool.

88. A method according to claim 86 wherein the information gathered in the database is limited to data that is essential to each authorized user for determining possible problems connected with issues to which the worker is not assigned.

89. A method according to claim 23 wherein workers assigned to said plurality of systems includes workers assigned to all the systems.

90. A method according to claim 32, wherein the message is sent automatically.

91. A system according to claim 92 wherein each of the parts have an identification code and wherein identical parts in different systems of the aircraft have different codes.

92. A computer system having stored therein a database for storing parts

information in a working environment including a plurality of different departments, assigned to perform design tasks of respective different aircraft systems in which at least some parts of the aircraft are assigned a worker code that indicates worker responsibility for design of that part and also having a database that associates each of the worker codes with one or more workers responsible for the design, such that changing worker assignments does not require changes in the part numbers.

EVIDENCE APPENDIX

This appeal has no evidence appendices.

RELATED PROCEEDINGS APPENDIX

This appeal has no related proceedings.

CASE LAW APPENDIX

Appendix A – Summary of Case Law regarding MPEP 2144 (II)A.

APPENDIX A

Case Law appendix on removing an element and its function

The MPEP section cited by the Examiner mentions three cases. These are *Ex parte Wu; In re Larson and In re Kuhle.* However, before discussing these three cases, applicant wishes to bring the following cases, which are believed to be more on point to the Examiner's attention. These are: *In re Wright* 145 USPQ 182 (CCPA 1965); *In re Karlson,* 136 USPQ 184 (CCPA 1963); and *In re Ochiai,* (CAFC 1995) 37 USPQ2nd 1127. After discussing these cases, applicant will show that the cases cited in the MPEP section that quotes them do not stand for the premise that appears to be at the foundation of the rejection.

In re Wright, states in headnote 4:

4. Patentability--Adding or subtracting parts (§ 51.05)

Finding that elimination of specific element and its function would be an obvious expedient is based upon a determination of obviousness under 35 U.S.C. 103, not upon a mechanical rule, which court is asked to extract from In re Karlson, 136 USPQ 184, about omission of element and its function from known combination being obvious if remaining elements perform same function as before; language to this effect in Karlson case was not intended to short-circuit wording of section 103.

In the body of the decision, the Court found further:

[4] Finally, we believe the word "solely" does not so limit claim 15 as to render it patentable. The afterburner fuel control of Chandler is governed by two parameters, pressure differential across the compressor and tail pipe temperature. We agree with the solicitor that "the elimination of the temperature parameter for the afterburner fuel control of Chandler * * * together with its tailpipe safeguarding function, would be an obvious expedient," but we hasten to add that this finding is based upon a *determination of obviousness under section 103* and not upon a mechanical rule, which the solicitor would have us extract from In re Karlson, 50 CCPA 908, 311 F.2d 581, 136 USPQ 184 , about the omission of an element and its function from a known combination being obvious if the remaining elements perform the same function as before. Language to this effect in Karlson was never intended to short-circuit the clear wording of 35 U.S.C. 103. The same reasoning applies to the word "solely" in describing the regulating of fuel flow to the main combustion chamber.

The headnote of *In re Karlson* was apparently considered to provide a *per se* rule. However, not only is such a rule not supported by the discussion, it is, as has been indicated above explained away by the board in *In Re Wright. In Re Karlson* states in headnote 1:

1. Patentability--Adding or subtracting parts (§ 51.05)

Omission of element and its function in combination is obvious expedient if remaining elements perform same functions as before.

And in the body of the decision:

On the other hand, we agree with the finding below that it would be obvious to one having ordinary skill in the art to remove the screen and tube in the Shuldener tank to provide "a clear and unobstructed interior space" as in the claims here presented.

Appellant contends that the board's holding that it would not be unobvious to eliminate the screen and filler tube of Shuldener ignores the inventive concept of Shuldener. It is asserted that such modification would change the function of Shuldener's feeder tank in that he would not be able to obtain a concentrated solution in the lower half of the tank and an unconcentrated solution in the upper half of the tank.

Appellant's contention that the inventive concept of Shuldener requires the

maintenance of a supply of chemical near the center of the tank to permit the incoming turbulent flow of water to aid in dissolving of the chemical, is negated by the plain indication of Shuldener that the chemical is charged into the tank only after the shunt flow of water through the tank has been shut off by closing the appropriate valve, thus eliminating the flow of water through the tank while the chemical is dissolving.

[1] It is, of course, apparent that the elimination of the Shuldener screen and filler tube eliminates the functions of those elements. It is well settled, however, that omission of an element and its function in a combination is an obvious expedient if the remaining elements perform the same functions as before. In re Nelson, 40 CCPA 708, 198 F.2d 837, 95 USPQ 82 ; In re Eliot, 22 CCPA 1088, 76 F.2d 309, 25 USPQ 111 .

We believe the record clearly supports the conclusion of the board that no change in the functions of the remaining elements would result from the omission of the screen and filler tubes.

We find no logical support for appellant's argument that to remove the screen and filler tube would destroy the structure relied on by Shuldener to execute his invention since Shuldener considered it necessary to have a means for providing the concentrated and unconcentrated solutions in his tank. The Shuldener patent discloses that the screen "will intercept any chemical that has not dissolved by the time it reaches the screen and this may occur when the chemical is poured in fast." This indicates that much, if not all, of the chemical would dissolve before reaching the screen. Shuldener indicates that the filler tube is a "preferred" element which "may be" provided to confine the solid chemical as it passes through the upper portion of the tank. The screen and tube would seem to be indicated when it would be advantageous to dissolve the chemicals in the upper portion of the tank. If it were thought desirable to dissolve the solid chemical in the lower portion of the tank, elimination of the screen and tube would seem to be suggested. The purpose of the Shuldener screen is to facilitate the dissolving of highly soluble chemicals while appellant specifies a slowly soluble reacting chemical. It would be apparent that a slowly soluble chemical might be used in Shuldener and that it would be obvious to omit the screen in such case.

It is clear that while the headnote seems to state a *per se* rule as to the deletion of an element, the analysis shows clearly that the court carried out an analysis under 35 U.S.C. §103 of whether it would have been obvious to build a device without the

function. The court found that it would be obvious to do so and thus that the deletion of the structure was also obvious.

In re Ochiai is a later case whose headnote reinforces the proposition stated in *In Re Wright* and which provides a broad discussion of the issue of application of *per se* application of rules to obviousness enquiries. It states, in part, in its headnotes:

> **3. Patentability/Validity -- Obviousness – In general (§ 115.0901)**
>
> No per se rules of obviousness have been established by precedent, and reliance on any such rules that eliminate need for fact- specific analysis of claims and prior art is legally incorrect and must cease, since use of per se rules in obviousness determination is inconsistent with 35 USC 103, which entitles applicant to issuance of otherwise proper patent unless Patent and Trademark Office establishes that invention, as claimed in application, is obvious over cited prior art, based on specific comparison of that prior art with claim limitations.

The text of *In re Ochiai* goes on to analyze the legal situation regarding per se rules and obviousness, mentioning several of the cases cited above:

> ***The Alleged Conflict in Our Case Law***
>
> Both the Solicitor and Ochiai devote substantial portions of their briefs to purported demonstrations that our precedents on the obviousness *vel non* of chemical processes are, if not in conflict, at least in severe tension with one another and thus create unnecessary confusion. Both parties identify the same two sets of three cases as presenting the conflict: *Larsen* , *Albertson* , and *Durden* , upholding rejections on appeal, are said to be inconsistent with *Kuehl* , *Mancy* , and *Pleuddemann* , reversing rejections on appeal. While we agree that *some* generalized commentary found within several of these decisions may present minor tensions, both Ochiai and the Solicitor draw far too bleak a picture of the state of our case law. Other language in these cases, like their actual holdings, obviates any real inconsistency.
>
> In *Albertson* , the court "reiterate [d] that all of the evidence must be considered on the 'subject matter as a whole,' from the viewpoint of one skilled in the art, in the determination

of obviousness, and not simply the patentability of one of the starting reactants in a process." *Albertson* , 332 F.2d at 382, 141 USPQ at 732. Thus, the Board in this case looked to the general result in *Albertson* while ignoring the *Albertson* court's explicit methodology. Every subsequent case that the parties discuss has been grounded on the same analytic principle: namely, that section 103 requires a fact-intensive comparison of the claimed process with the prior art rather than the mechanical application of one or another *per se* rule. *See Pleuddemann* , 910 F.2d at 827, 15 USPQ2d at 1741 ("We repeat that the controlling law is in Section 103 of the statute, which must be applied to the facts of this case."); *Durden* , 763 F.2d at 1411, 226 USPQ at 362 ("Our function is to apply, in each case, Section 103 as written to the facts of disputed issues, not to generalize or make rules for other cases which are unforeseeable."); *Mancy* , 499 F.2d at 1292, 182 USPQ at 305 ("[T]he statutory standard of Section 103 for determining obviousness of an invention is whether in view of the prior art the invention as a whole would have been obvious at the time it was made."); *Kuehl* , 475 F.2d at 665, 177 USPQ at 255 ("The test of unobviousness is a statutory test and

requires comparison of the invention with the prior art in each case. . . ."). As a consequence, these cases do not -- indeed, *cannot* -- present or create conflicting legal rules. They present, instead, applications of a unitary legal regime to different claims and fields of art to yield particularized results. It is thus surprising that the Board relies on *Durden* for a general rule when the *Durden* court expressly cautioned the bar "not to generalize or make rules for other cases."

Because the regime of section 103, much like the Fourth Amendment proscriptions against "unreasonable" searches and warrants issued upon less than "probable cause," mandates that legal outcomes turn on the close analysis of facts, reasonable persons may well disagree about the outcome of a given obviousness determination. These disagreements over the application of a legal rule can, however, be transformed into perceived "irreconcilable conflicts" between legal rules only when, as occurred here, examiners, members of the Board, and patent lawyers purport to find competing *per se* rules in our precedents and argue for rejection or allowance of a particular claim accordingly. We acknowledge that some generalized commentary found in these cases reviewing rejections of claims directed to chemical processes may, if viewed in isolation, have inadvertently provided encouragement to those who desire *per se* rules in this area. For example, one case includes an extensive

discussion of the conceptual link between the obviousness *vel non* of a chemical composition and the obviousness *vel non* of a process for making the composition. 6 Such discussion, while entirely accurate, may have contributed to the erroneous view that one may determine the obviousness of a chemical process merely by determining whether it is a process for making a composition. As the cases noted above make clear, however, this is not and has never been the law of section 103. Indeed, *Durden* , the very case relied on by the

examiner and the Board for a purported *per se* rule, clearly states that there are no such *per se* rules.

[3] The use of *per se* rules, while undoubtedly less laborious than a searching comparison of the claimed invention -- including all its limitations -- with the teachings of the prior art, flouts section 103 and the fundamental case law applying it. *Per se* rules that eliminate the need for fact-specific analysis of claims and prior art may be administratively convenient for PTO examiners and the Board. Indeed, they have been sanctioned by the Board as well. But reliance on *per se* rules of obviousness is legally incorrect and must cease. Any such administrative convenience is simply inconsistent with section 103, which, according to *Graham* and its progeny, entitles an applicant to issuance of an otherwise proper patent unless the PTO establishes that the invention *as claimed* in the application is obvious over cited prior art, based on the specific comparison of that prior art with claim limitations. We once again hold today that our precedents do not establish any *per se* rules of obviousness, just as those precedents themselves expressly declined to create such rules. Any conflicts as may be perceived to exist derive from an impermissible effort to extract *per se* rules from decisions that disavow precisely such extraction.

In sum, as we clearly indicated in *In re Dillon* , a recent in banc decision, " [w]hen any applicant properly presents and argues suitable method claims, they should be examined in light of all . . . relevant factors, free from any presumed controlling effect of *Durden* " or any other precedent. 919 F.2d 688, 695, 16 USPQ2d 1897, 1903 (Fed. Cir. 1990) (in banc), *cert. denied* , 500 U.S. 904 (1991). Having compared Ochiai's claims, limited as they are to the use of a particular nonobvious starting material for making a particular nonobvious end product, to the prior art of record, we reverse the rejection of claims 6 through 10 as an incorrect conclusion reached by incorrect methodology. *Reversed* .

Although this case did not deal with the same *per se* rule as did *In re Karlson* cited above by applicants, *per se* rules of any kind are found to be inapplicable.

Returning to the cases cited in the MPEP:

Ex Parte Wu is substantially limited in its teaching. It states:

Appellant's claims exclude the presence of Murdock's salts of polybasic acids in the composition defined as "consisting of" the listed components. We agree with the examiner that it would have been obvious to omit Murdock's polybasic acid salts when the function attributed to these salts is not desired or required. Murdock teaches that these salts are beneficial when the composition is employed in contact with fresh water (column 3, lines 4 through 7). Omission of the salt component in preparing compositions to be used to provide corrosion resistance to metals in environments which do not encounter fresh water would have been obvious.

It is clear from this paragraph that the omission of the function itself was considered to be obvious. Thus the rejection followed from the fact that if it was obvious to delete the function, the deletion of the structure that provides the function was equally obvious.

In re Kuhle does not appear to state a rule that can be applied widely. A study of the facts of *In re Kuhle* immediately shows the difference between that case and the present one. In the cited case, the element removed was a switch which turned the device on and off. It turned out that the device turned itself off when it was removed

from the soil and the functioning of the device as a whole (and not just the parts that were left) was not really changed. In *In re Kuhle* the part that was removed did not effect the operation or functionality of the device, it was merely an unimportant feature.

In re Larson states in its headnotes:

> **3. Patentability--Aggregation or combination--Omission of part (§ 51.161)**
>
> If feature of reference structure is not desired, it would seem a matter of obvious choice to eliminate it and the function it serves; claim is refused.

In the body of the decision, the following analysis is present (In the paragraph bridging pages 6 and 7 of the enclosed copy of the case):

> The added structure shown in the Le Clair et al. patent serves a particular purpose in that it increases the cargo carrying capacity. If this additional features is not desired, it would seem a matter of obvious choice to eliminate it and the function it serves. In re Listen, 30 CCPA 1223, 136 F.2d 719, 58 USPQ 481 .

Here again the question was whether the feature would be desired or not. The Court agreed with the Examiner that it was a matter of choice as to what load was being carried and that if a lighter load was used, then the elimination of the elements needed to increase the capacity was obvious.

Applicant also notes that the section of the MPEP which refers to the three cases cited by the Examiner (MPEP §2144.04 (II) (A)) is entitled "Omission of an Element and its Function is Obvious if the Function of the Element is Not Desired." (Emphasis added.) Applicant's submit that while the section does not state clearly enough that the usual reasoning of §103 are to be followed to determine if it would be obvious to delete the function, this is the law which this section of the MPEP indicates should be followed.

Summary of case law arguments

In summary, the weight of the case law, including those cited by the MPEP, either supports or does not contradict applicants' position that determining obviousness under §103, turns on whether it would have been obvious to delete the function. No *per se* rule exists.